

## A REVIEW OF RECENTLY DISCOVERED TYPE SPECIMENS OF BERMUDA AMPHIPODA (CRUSTACEA: PERACARIDA) DESCRIBED BY B. W. KUNKEL (1882-1969)

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*Abstract.*—Type specimens of six of the seventeen species of Bermuda amphipods described by Kunkel (1910) are reviewed: *Maera tinkerensis*, *Melita planaterga*, *Parhyalella batesoni*, *Eurystheus* [= *Gammaropsis*] *lina*, *Isaea longipalpus*, and *Caprella bermudia*. The first four listed species are redescribed and refigured. The lectotype and recently collected specimens of *Melita planaterga* are compared with Karaman's (1981) redescription of the species. The authors conclude that the specimen used by Karaman represents a new species. *Caprella bermudia* is synonymized with *C. equilibra*.

In 1898 and 1901 A. E. Verrill conducted scientific expeditions to the Bermuda islands and amassed large collections of terrestrial and marine invertebrates. Verrill himself reviewed some of the crustaceans, mostly decapods, in several papers. To one of his students, Beverly Waugh Kunkel, Verrill gave the task of elucidating the status of the Bermuda amphipod fauna. Verrill's collections, along with those of G. Brown Goode and others, formed the basis of Kunkel's (1910) monograph on the Bermuda amphipods. Prior to this publication, the amphipods of Bermuda were virtually unknown and, to date, Kunkel's paper remains the only significant study of its kind. Johnson's (1986) eclectic summary of the Bermuda amphipods provides little additional information and leaves most of the long-standing taxonomic questions untouched.

Kunkel described 17 new species, 16 gammaridean and 1 caprellidean, and erected three new genera in his monograph. Unfortunately, he did not clearly designate type specimens, a fact that made their recovery from the general collections difficult and at times serendipitous. E. L. Mills (1964) reviewed the status of six of Kunkel's type specimens. The present paper reviews six additional species for which the type spec-

imens have been found. Because the first author has culled all the amphipods from YPM's crustacean collection, including all unidentified specimens, virtually no possibility exists for finding type material of the remaining species described by Kunkel. This situation is unfortunate as one species, *Insula antennuella*, may have been incorrectly figured (Barnard 1969) and was the basis for a new genus.

In general, the descriptions of Kunkel (especially the figures) were not executed with sufficient detail to facilitate contemporary comparison with other known species. Revised descriptions of the recently discovered type specimens are desirable, therefore, before the description of new taxa complicates the already confused state of the Bermuda amphipod fauna.

### Systematics

The family categories used herein follow Bowman and Abele (1982). Legend: Body parts marked by abbreviation beginning with uppercase letters, and lowercase letters separated from body part indications read as follows: A, antenna; Gn, gnathopod; Hd, head; LL, lower lip; Md, mandible; Mx, maxilla; Mxpd, maxilliped; T, telson; U,

uropod; dm, damaged; plp, palp; s, setae missing.

Melitidae Bousfield, 1973

*Maera tinkerensis* Kunkel

Figs. 1–2

*Maera tinkerensis* Kunkel, 1910:49–51, fig. 18.—Barnard, 1962:100.

*Description.*—Male: Dorsal surface of body finely setose, pleonal epimera 1–3 each with small ventroposterior tooth, epimeron 1 with 1 ventral spine, epimera 2–3 with 3–4 ventral spines.

Head subequal to combined length of pereonites 1 and 2, lateral lobe broadly rounded, eye weakly pigmented in alcohol-preserved specimens, ocelli separated.

Antenna 1 longer than antenna 2, nearly 50% body length, peduncular article 1 somewhat shorter than article 2, posterior margin with a few spines, article 3 20% article 2, primary flagellum composed of at least 10–13 articles (terminal article(s?) missing), accessory flagellum 6-articulate, terminus minute. Antenna 2, peduncle extending nearly to length of peduncle of antenna 1, flagellum short, composed of 6 articles.

Left mandible with cusped lacinia, proximal spine row with 1 large cusped spine followed by 8 smaller, plumose spines; palp slender, article 1 with distal tooth, 33% length article 2, posterior margin article 2 setose, longer than article 3. Maxilla 1, inner plate distally with 1 short spine and 2 long plumose setae, outer plate with 8 stout, recurved, bifid spines; palp 2-articulate. Maxilla 2, inner plate less broad than outer plate.

Gnathopod 1, ventroanterior corner of coxal plate acutely produced, posterior margin of basis with long setae, article 3 with plumose setae on posterior margin, article 5 triangular, longer than article 6, posterior margin and inner facial surface densely setose, article 6 oval, palm oblique, margin lined with small spines, dactyl slender, tip bearing small spatulate process. Gnathopod

2 much larger than gnathopod 1, coxa square, corners rounded, posterior margin of basis with 2 spines and a few setae, article 5 30% length article 6, posterior lobe densely setose, article 6 oval, much longer than broad, palm oblique, elongate, sinusoidal and distally serrate, posteriorly defined by sharp tooth bearing spine at base, posterior margin lined with submarginal spines and a few setae, inner facial surface with long, stout spine, dactyl stout, with 4 setae on anterior margin, tip bearing small spatulate process, dactyl closing between palmar tooth and inner facial spine.

Pereopods 3–4 similar, normal, coxa 4 not posteriorly excavate; pereopod 5 shorter than pereopods 6–7; pereopods 6–7 similar, subequal in length, pereopod 7, proximo-posterior corner of basis produced into rounded lobe; all dactyls singly annulate.

Uropod 1 extending slightly beyond uropod 2, dorsal surface of peduncle with row of short and row of long spines, distal spines of both rows longest and very stout, ventral surface with large proximal spine, rami shorter than peduncle, spinose, outer ramus shorter than inner. Uropod 2, peduncle stout, shorter than rami, with 2 rows of spines, rami spinose, outer ramus shorter than inner. Uropod 3 missing from specimen.

Telson longer than broad, deeply excavate, lobe apices pointed, outer margins notched, stout spines submarginally at base of each notch.

*Remarks.*—Kunkel's original description agrees fairly well with the type specimens but lacks considerable detail, most notably in uropod spination, the details of the gnathopods, and in precise length of specimens. The uropods are much more spinose than as figured by Kunkel, and the lengths of the terminal spines on uropod 2 were exaggerated. Kunkel drew the palm of gnathopod 2 crenulate along its entire length, whereas in the type material the crenulation extends only  $\frac{1}{3}$  the length beginning at the distal end.

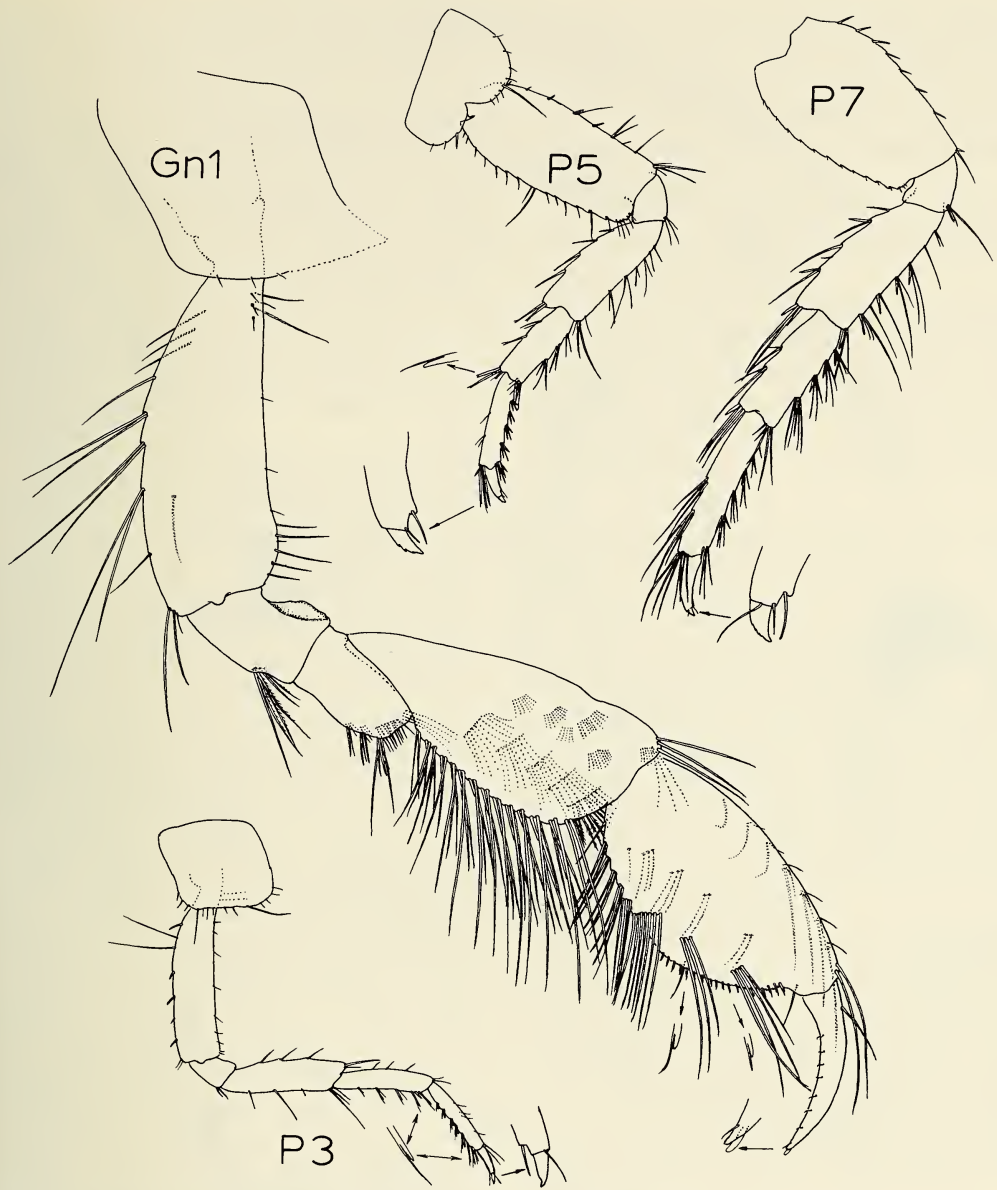


Fig. 1. *Maera tinkerenis* Kunkel: YPM 8220, male syntype, 8.4 mm.

*Material examined.*—YPM 8220, male, 6.7 mm, syntype, Harrington Sound, Bermuda, collector and date unknown.—YPM 8221, male, 8.4 mm, syntype, Harrington Sound, Bermuda, collector and date unknown.—YPM 8222, male, 6.3 mm, syntype, Harrington Sound, Bermuda, collector and date unknown.

*Melita planaterga* Kunkel  
Figs. 3–4

*Melita planaterga* Kunkel, 1910:34–37, fig. 12.—Barnard, 1962:107–108.

*Melita planaterga* (?): Karaman, 1981:29–50.

*Description.*—Male: Head, lateral lobes

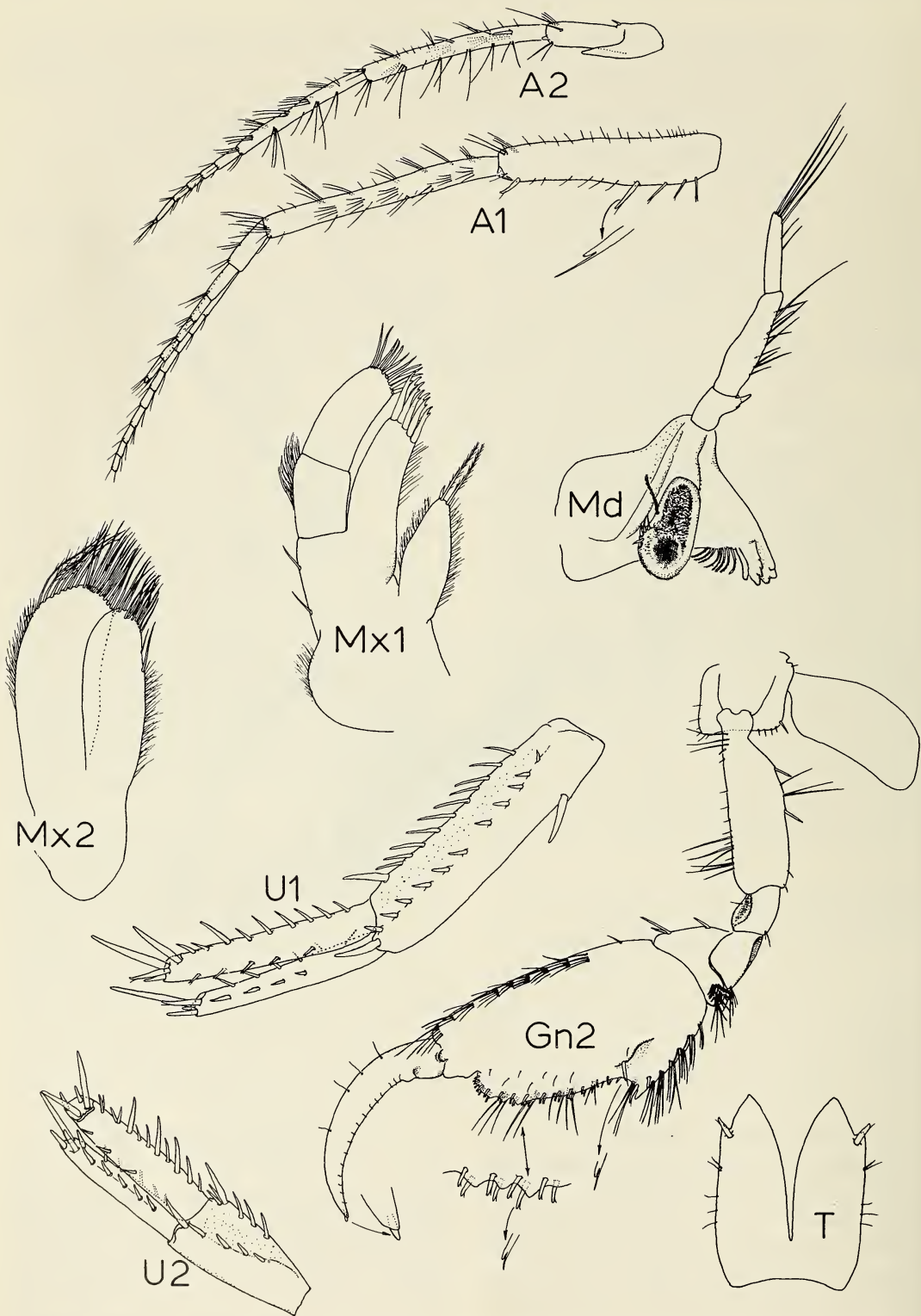


Fig. 2. *Maera tinkerenis* Kunkel: YPM 8220, male syntype, 8.4 mm: A1, A2, Gn2, Md, T, U1 and U2. YPM 8221, male syntype, 6.7 mm: Mx1, Mx2.

rounded, eyes not distinct in alcohol-preserved specimens. Pleon dorsally smooth, epimeron 3 produced behind to form large tooth, urosome segment 1 with short medial mucronation on posterior margin, urosome segment 2 with lateroposterior spine.

Antenna 1 greater than 50% body length, peduncular article 1 stout, with 2 proximal and 1 distal spines on posterior margin, article 2 120% length article 1, article 3 33% length article 2; flagellum longer than peduncle, accessory flagellum 3-articulate, terminus minute. Antenna 2 slightly shorter than antenna 1.

Mandible with 4-cusped lacinia, molar moderately strong; mandibular palp article 1 60% article 2, article 2 30% longer than article 3. Maxilla 1, inner plate truncate, with distal setae; outer plate with 7 stout, recurved, bifid spines; palp 2-articulate, distally moderately serrate, with stout spines and a few setae. Maxilla 2, inner plate as broad as outer plate, inner marginal setae extending proximally  $\frac{2}{3}$  the distance of medial margin, outer plate distally setose, a few setae plumose.

Gnathopod 1, basis with 2 long setae on anterior margin near base, distal half anterior margin with dense groups of long, exceptionally fine setae, article 4, distal portion extended into distinct, slightly excavate margin with setae, article 5 much longer than broad, anterior margin lined with groups of setae, posterior margin with 8 or 9 fascicles of long setae, inner facial margin with 4 groups of setae, article 6 shorter than article 5, distoposterior corner produced into rounded lobe with setae, palm incised near base of article 7, base of dactyl inflated, anterior margin with small distal spine. Gnathopod 2, anterior margin of basis with groups of long setae, articles 3 and 4 subrectangular, article 4, distoposterior corner produced into small tooth, article 5, anterior and posterior margins densely lined with fascicles of setae, setae on posterior margin serrate, inner facial margin with several groups of long setae, article 6, length 170% width, anterior and posterior margins

densely lined with long setae, palm oblique, excavated margin result of damage, lined with plumose setae, inner facial surface adjacent to palm forming depression, article 7 longer than palm, closing against facial depression of article 6.

Pereopods 5–7, bases of anterior and posterior margins finely serrate, serrations defined by small spines.

Uropod 1 extending slightly beyond uropod 2, peduncle spinose, slightly longer than rami, ventral margin with 1 stout spine, rami spinose, rami equal, uropod 2, peduncle and rami spinous, rami equal to each other and to peduncle, uropod 3 missing from specimen.

Telson split nearly to base, each lobe bearing 1–3 terminal spines and 0–1 spines along inner margin.

*Remarks.* — Kunkel described the palm of gnathopod 2 as slightly concave. The dactyl in his figure, however, obscures the margin of the palm. Our redescribed gnathopod 2 of the lectotype shows a concavity (Fig. 3). Examination of recent material from Bermuda, however, suggests that the normal condition of the palmar margin is entire, not concave, and of the palmar setae, long and plumose, not short.

Karaman (1981) redescribed this species from a single male specimen collected at Castle Harbour, Bermuda, noting many differences between his specimen and Kunkel's. The type material of Kunkel, however, confirms many points of his original description and brings to light more differences from the specimen described by Karaman.

The dorsal mucronation on urosome segment 1, as figured by Karaman, is much more prominent than on the type specimen; its mucronation extends approximately  $\frac{1}{5}$  the length of urosome segment 2 whereas Karaman's figure shows it extending nearly  $\frac{1}{2}$  the length of urosome segment 2. Moreover, on Kunkel's specimen we find no notch at the insertion of the dorsolateral spine on the posterior margin of urosome segment 2.

Karaman figured a strongly dentate palp

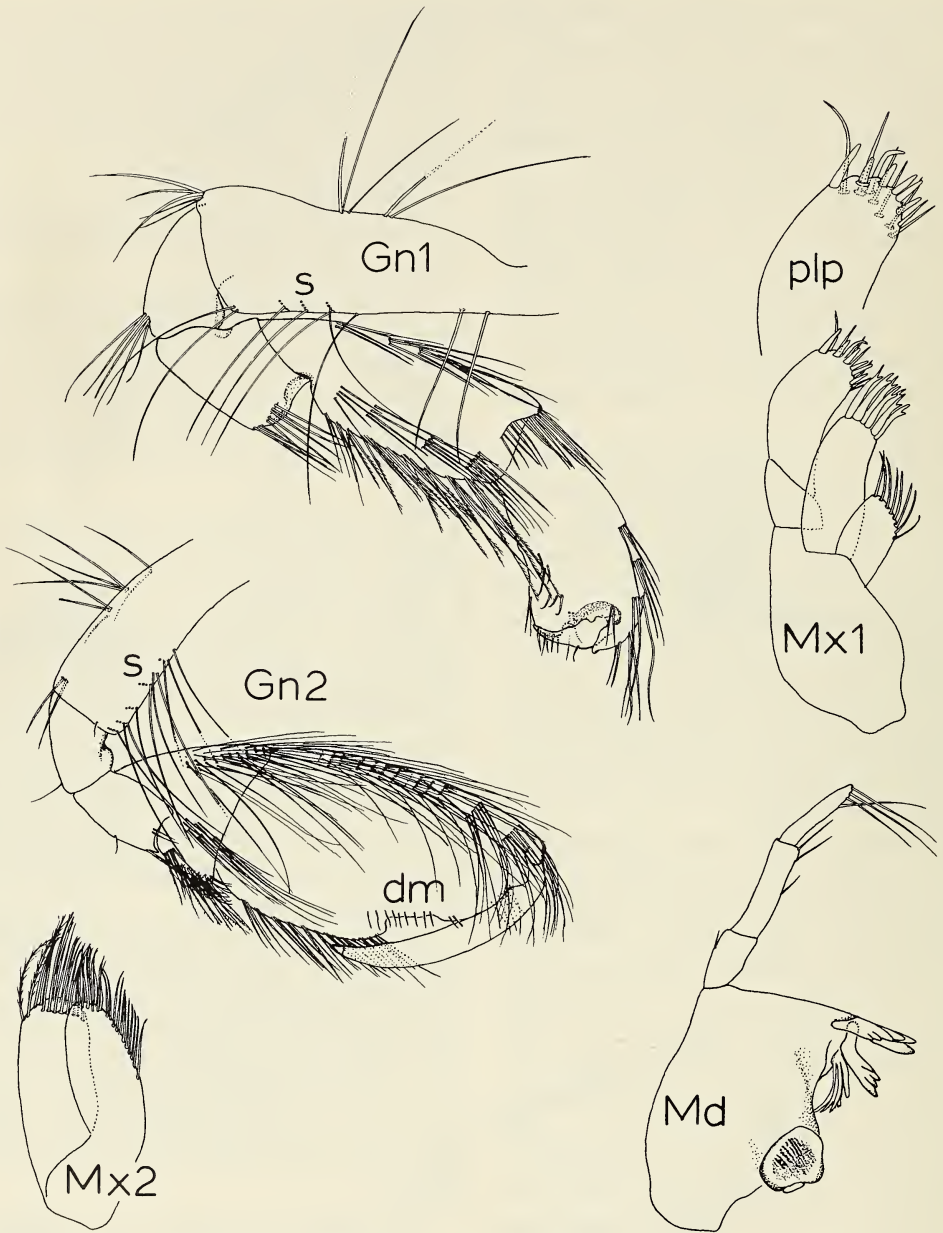


Fig. 3. *Melita planaterga* Kunkel: YPM 8227, male lectotype, 5.4 mm.

article 2 on maxilla 1. In the lectotype the distal margin of the maxilla 1 palp is only moderately dentate; the teeth are acutely rounded and not pointed as in Karaman's specimen.

Kunkel stated that the accessory flagel-

lum of antenna 1 is 2-segmented. Careful examination of the type revealed that the accessory flagellum is actually 3-segmented; the terminus is miniscule and was certainly overlooked by Kunkel. Karaman, however, clearly figured a 4-segmented accessory fla-

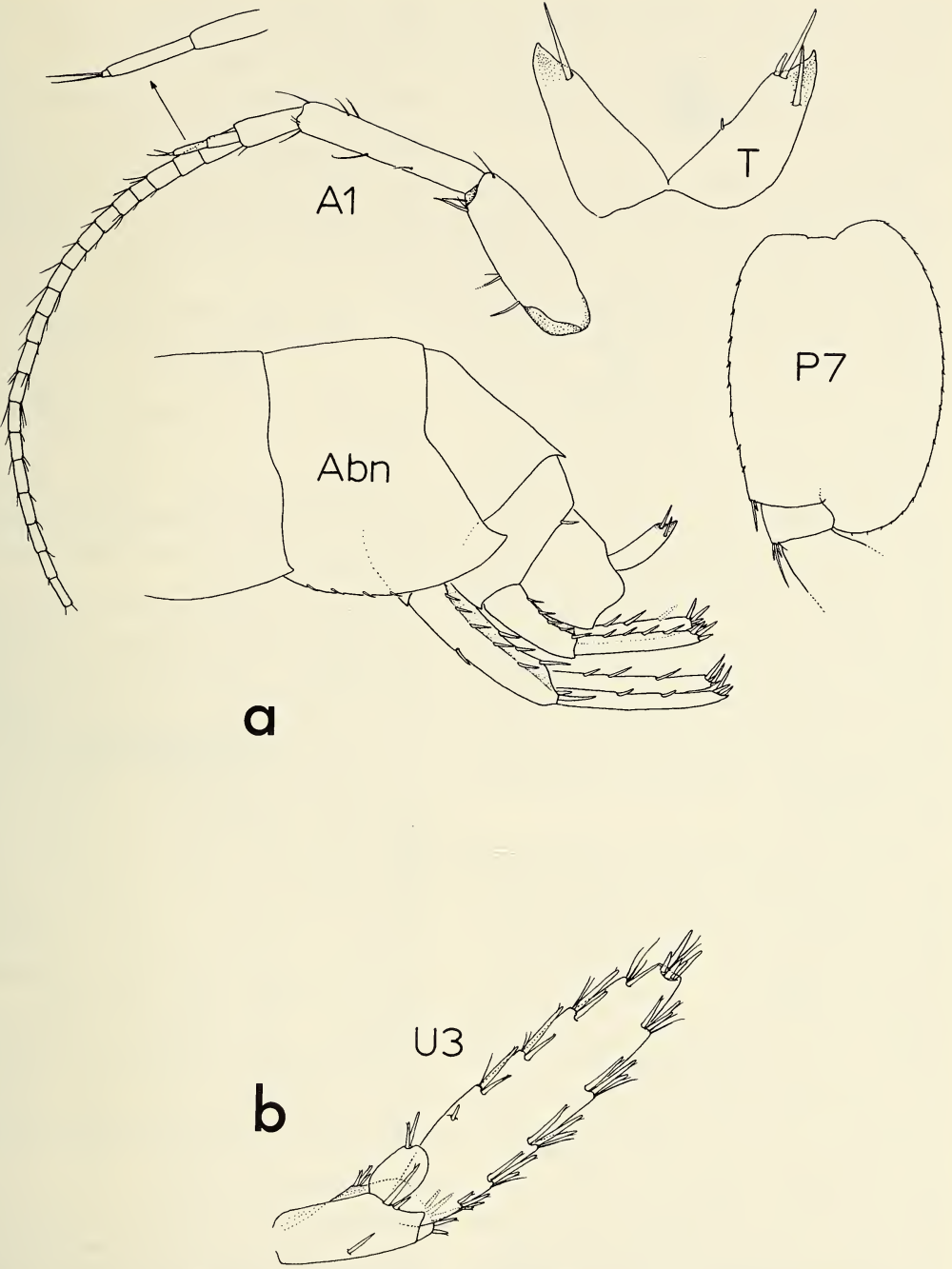


Fig. 4. *Melita planaterga* Kunkel: a: YPM 8227, male lectotype, 5.4 mm; b: YPM 8229, male, 4.5 mm.

gellum with a large terminal segment. In specimens examined from material recently collected at several localities in Bermuda, all had an accessory flagellum as we have figured; none had 4 segments as stated by Karaman.

Examination of these recently collected specimens supports the differences between Kunkel's and Karaman's specimens in other aspects. The posterior spination of the first peduncular segment of antenna 1 is invariably as Kunkel illustrated as is the inner marginal spination of the telson. Furthermore, the spines on the peduncle and rami of uropods 1 and 2, although variable in number, are always significantly less than the number shown by Karaman and again agree with Kunkel's figure. Kunkel did not figure uropod 3 and his description is vague, but the third uropods of recent specimens (Fig. 4b) differ from those of Karaman's specimen; the peduncle in his specimen is less spinose and the rami more spinose than in the recent material. Finally, the serrate margin of the basis on pereopods 5–7 mentioned by Kunkel but not seen by Karaman is always present and distinct in all specimens we examined.

Karaman's specimen, which differs in so many characteristics, undoubtedly represents a new species; without seeing his specimen, however, we feel it prudent not to erect a new taxon.

*Material examined.*—YPM 8227, Flatts Village, Bermuda, collector and date unknown, 1 lectotype male (5.4 mm).—YPM 8229, Whalebone Bay, St. George's, Bermuda, M. F. Gable and class, 22 May 1985, intertidal, among rocks and vegetation, 1 male [uropod 3 figured].—YPM 8230, Whalebone Bay, St. George's, Bermuda, M.F. Gable and class, 22 May 1985, intertidal, among rocks and vegetation, 2 males, 2 females (ovigerous).—YPM 8231, Ferry Reach, Bermuda, north of Long Bird Bridge, M.F. Gable, 29 May 1985, intertidal to subtidal, 1 male, 1 female, 3 juveniles.—YPM 8232, Devonshire Bay, Bermuda, M.F. Gable, 29 May 1985, under rocks, shallow sub-

tidal, 2 males, 2 females, 2 ?? [damaged specimens].—YPM 8233, Gravelly Bay, Bermuda, M.F. Gable, 31 May 1985, under rocks in subtidal honeycombed substrate, 2 females (1 ovigerous).—USNM Acc. No. 346847, Hungry Bay, Bermuda, M.L. Jones, 5 Sep 1981, from transect collection along length of bay, West Seawall, associated with rocks, 1 male, 1 female (ovigerous).

Hyalellidae Bulycheva, 1957

*Parhyalella batesoni* Kunkel

Figs. 5–6

*Parhyalella batesoni* Kunkel, 1910:74–76, fig. 28.

*Description.*—Male: Body dorsally smooth, coxa deep, anterior margins rounded. Pleonal epimera subquadrate, posterior corners not produced.

Head, lateral lobes rounded; eyes moderately large, oblong. Antenna 1 25% of body length, slightly longer than antenna 2, flagellum 110% length of peduncle, consisting of 11 to 15 articles; peduncular segments subequal in length, accessory flagellum lacking. Antenna 2 nearly 25% of body length, peduncular segments much broader than those of antenna 1, gland cone hidden, segment 3 short and stout, as long as broad, segment 4 as broad as 3, length of segment 4 to 5, 1:0.5, segment 5 narrower than 3 and 4; flagellum short, 25% length of peduncle, 3-articulate, basal article conjointed.

Maxilla 1, inner plate narrow, with short medial setules and 2 stout plumose terminal spines; outer plate with 8 stout, serrate spines, lateral margin distinctly excavate, pre-ecdysial serrate spines visible through facial surface; palp absent.

Gnathopod 1 subchelate, much smaller than gnathopod 2, posterior margin of article 2 produced, broadest point with 3 large and 1 small setae; article 5 nearly as broad and as long as article 6, posterior lobe with ridge of small spines, article 6 rectangular, posterior corner of transverse palm with small to medium spines and a few setae, dactyl short, stout, congruent with palm.



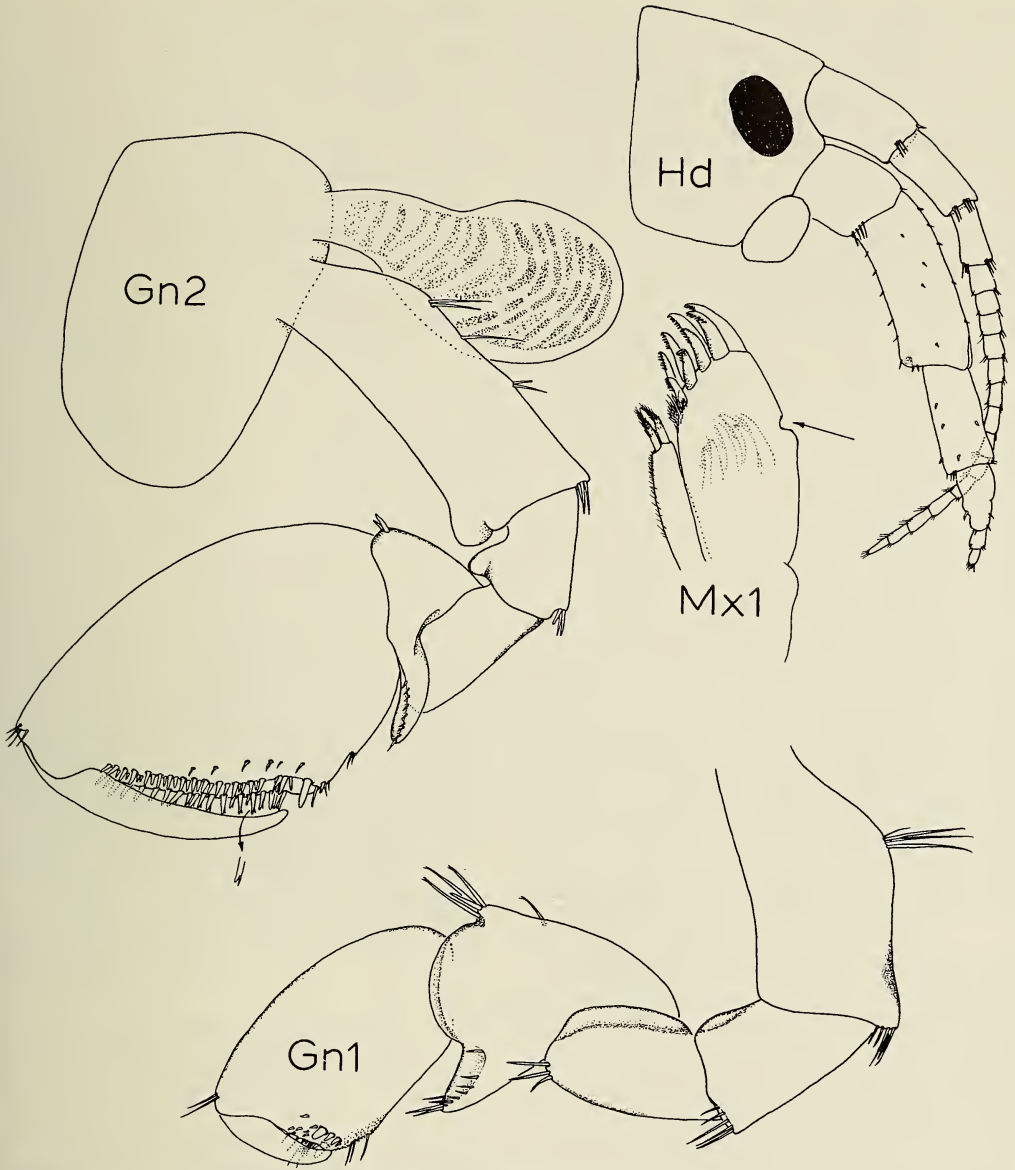


Fig. 5. *Parhyaella batesoni* Kunkel: YPM 8188, male holotype, 6.8 mm.

Gnathopod 2, powerful, subchelate, article 2 with anterodistal lobe; articles 3 and 4 normal, 3 with mammilliform anterior lobe; article 5 less than 20% length article 6, posterior lobe strong, distally produced between articles 4 and 6, lined with row of spines, article 6 equal to width of article 5, oval, palm oblique, margin incised, submarginally lined with stout spines, larger

spine at proximoposterior corner, dactyl congruent with palm.

Pereopods 3 and 4 normal, dactyls 1-annulate. Pereopods 5-7 similar, length increasing consecutively; article 2 expanded in all.

Uropod 1 extending beyond uropod 2, peduncle spinose, rami subequal, each with spines along dorsal margin and four ter-

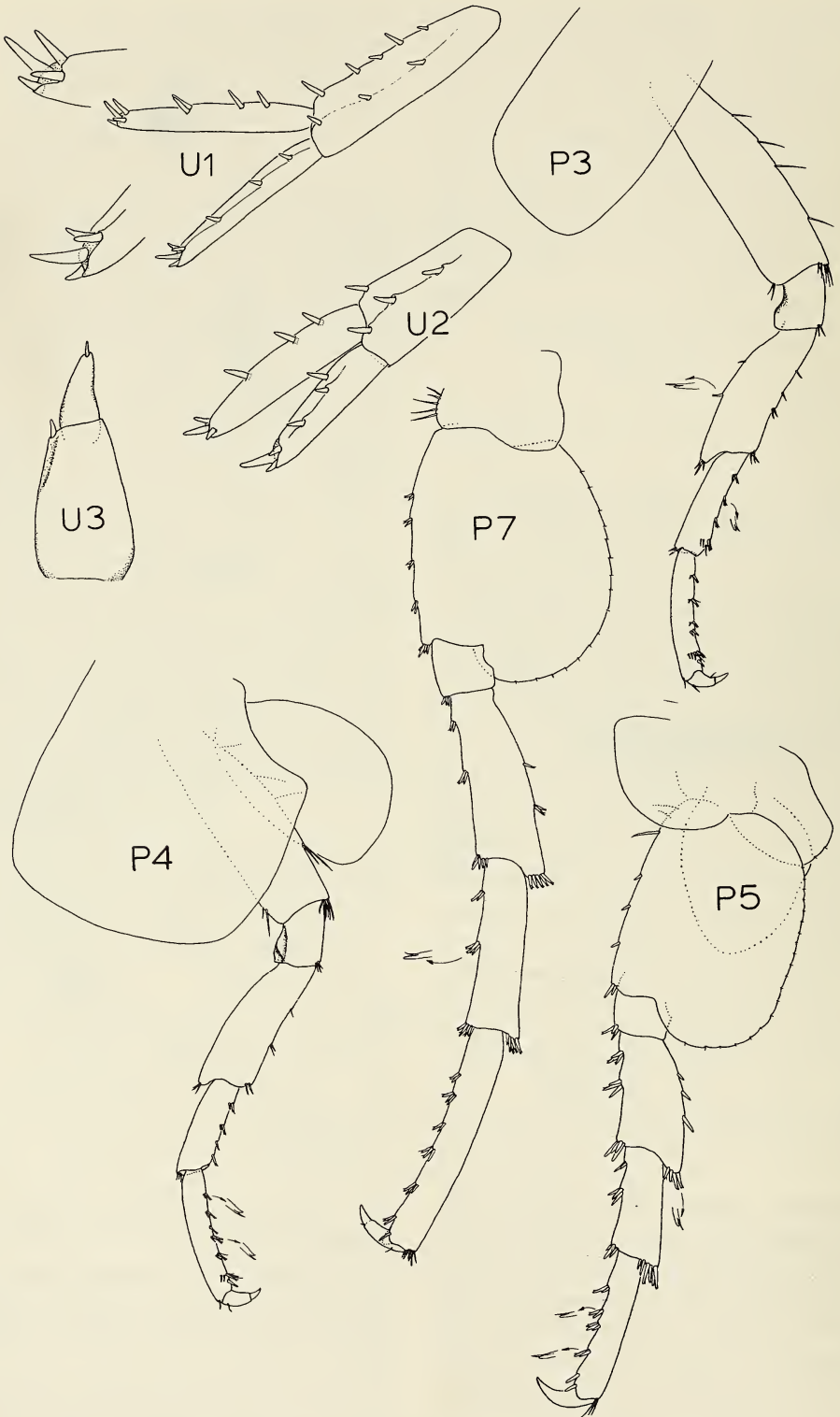


Fig. 6. *Parhyaella batesoni* Kunkel: YPM 8188, male holotype, 6.8 mm.

minal spines. Uropod 2 75% length uropod 1, peduncle with row of spines; outer ramus shorter than inner, both with marginal and terminal spines. Uropod 3, peduncle with 1 prominent spine at inner posterior corner, inner ramus absent, outer ramus stout, 40% length of peduncle, with 1 terminal spine.

*Remarks.*—The genus *Parhyaella* is diagnosed in part by the absence of a palp on maxilla 1. The type specimen lacked nearly all the mouthparts but fortunately still retained a single maxilla 1 so its form could be confirmed. Several species assigned to this genus, however, have been clearly described as having a palp, albeit vestigial, on maxilla 1. It is apparent that the species of *Parhyaella* need to be re-examined and the generic diagnosis re-evaluated.

Recent shallow water collections made in Bermuda by one of us (MFG) failed to turn up any additional specimens of *P. batesoni*. As the type specimen had no collection data, one can only speculate upon the habitat of this species. Several individuals of *Parhyaella* were recently collected at 20 m from Taiwan (in prep.); it is possible that *P. batesoni* also inhabits deeper water and may only rarely be collected in shallow water.

*Material examined.*—YPM 8188, Bermuda, collector and date unknown, 1 holotype male (6.8 mm).

Corophiidae Dana, 1849

*Gammaropsis lina* (Kunkel)

Figs. 7–9

*Eurystheus lina* Kunkel, 1910:81–83, fig. 31.

*Eurystheus* = *Gammaropsis* [in part], Barnard, 1969:271.

*Description.*—Male: Coxae moderately deep, overlapping. Pleon segments 1–3 each with one pair dorsolateral setae on posterior margin; posterior margin pleonal epimera broadly rounded, hind corner produced into small tooth. Urosome segment 1 with pair of 1 long and 1 short dorsolateral setae; urosome segment 2 with pair of 1 long and 2 short, dorsolateral setae.

Eye oval, situated in head lobe; head lobe

acute. Antenna 1 50% body length, peduncular segment length ratio 1:1.4:1; peduncular segment 1 twice as broad as segments 2 and 3, posterior margin of segments 2 and 3 densely setose; flagellum composed of 12 articles, 30% length of peduncle; accessory flagellum 5 articulate, terminus minute. Antenna 2 slightly shorter than antenna 1; peduncular segment 4 shorter than 5, posterior margin of both articles strongly setose; flagellum 40% length of peduncle, flattened, 1st article elongate.

Right mandible with serrate lacinia, 9 spines proximal to incisor, molar strong, ridged, with plumose accessory seta; palp 3-articulate, 1st article 25% length article 2, article 2 stout, subequal in length to article 3, posterior margin slightly excavate and setose, anterior margin article 3 with 3 long setae, distal margin armed with long, plumose setae. Lower lip with inner lobes well developed, outer lobes with pointed lateral projections. Maxilla 1, inner plate with plumose marginal setae, outer plate with about 9 stout, bifid spines; palp 2-articulate, distal margin of second article with short, stout spines. Maxilla 2, outer plate a little broader than inner, inner plate with row of facial setae. Maxilliped normal, palp 4-articulate, terminus bearing long distal setae.

Gnathopod 1 subchelate, smaller than gnathopod 2, article 4 distally rounded with long posterior setae, article 5 slightly longer than article 6, posterior margin and medial face with fascicles of long setae, article 6 ovate, fascicles of setae on posterior and anterior margins, palm oblique, with stout spines at proximoposterior corner. Gnathopod 2, article 5 33% article 6, posterior lobe prominent, article 6 elongate, 2.5 times longer than wide, rectangular, posterior margin densely lined with curly setae, palm transverse, convex, distoposterior corner produced into strong thumb, article 7 stout, with posterior tubercle hidden by long setae of article 6.

Pereopod 4 (pereopod 3 missing), coxal plate with long seta at distoanterior corner, basis with long seta on posterior margin;

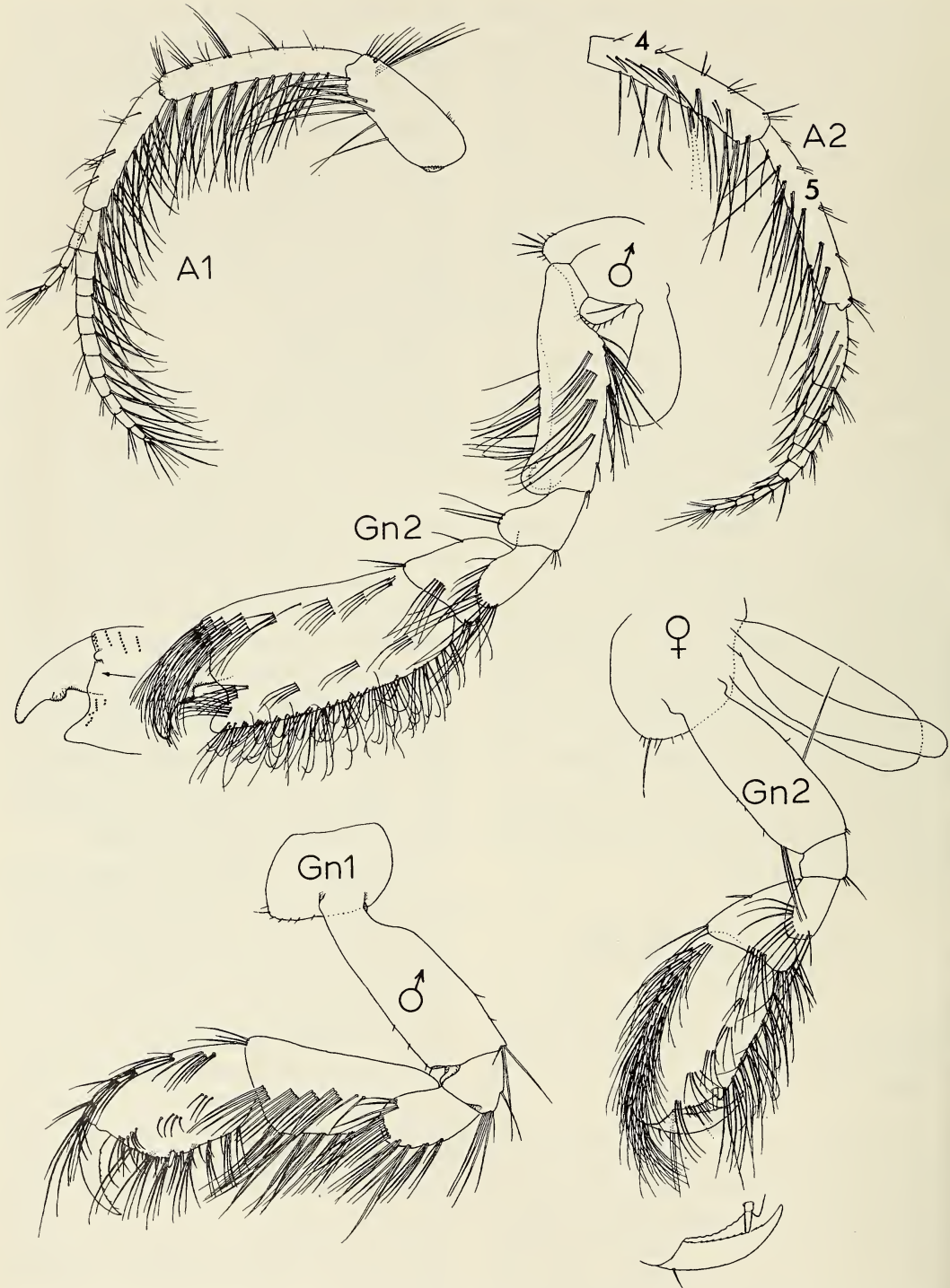


Fig. 7. *Gammaropsis lina* (Kunkel): YPM 8189, male syntype, 6.1 mm: A1, Gn1, Gn2; A2 from unattributed specimen. YPM8224, female syntype, 5.1 mm: Gn2.

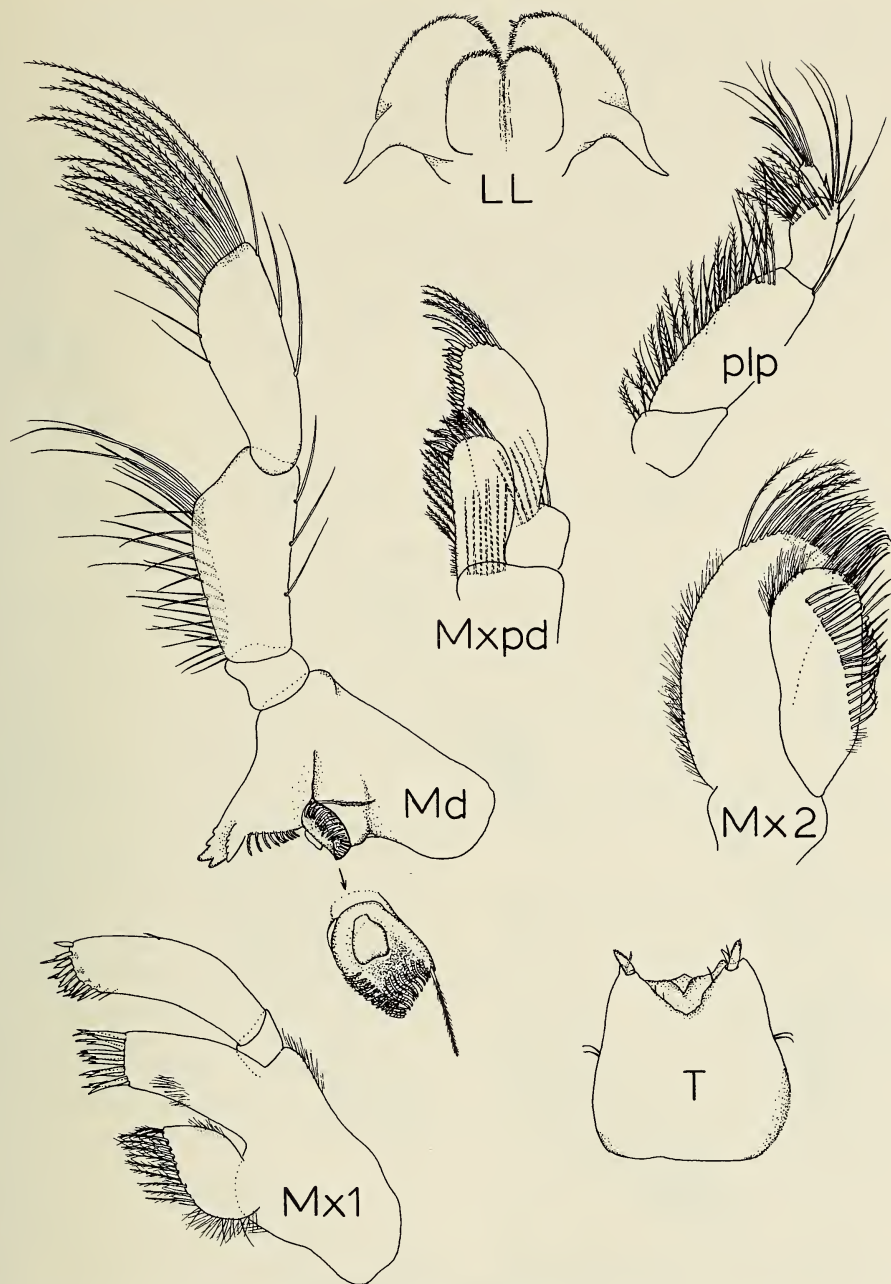


Fig. 8. *Gammaropsis lina* (Kunkel): YPM 8189, male syntype, 6.1 mm.

pereopod 5, basis somewhat expanded, articles 6 and 7 appearing antero-facing because of limb splaying; pereopod 6, coxa with spine at distoposterior corner, dactyl bifid; pereopod 7, proximoposterior corner

of basis produced acutely, articles 6 and 7 appearing antero-facing because of limb splaying.

Uropods extended behind subequally; uropod 1, interramal spine extending nearly

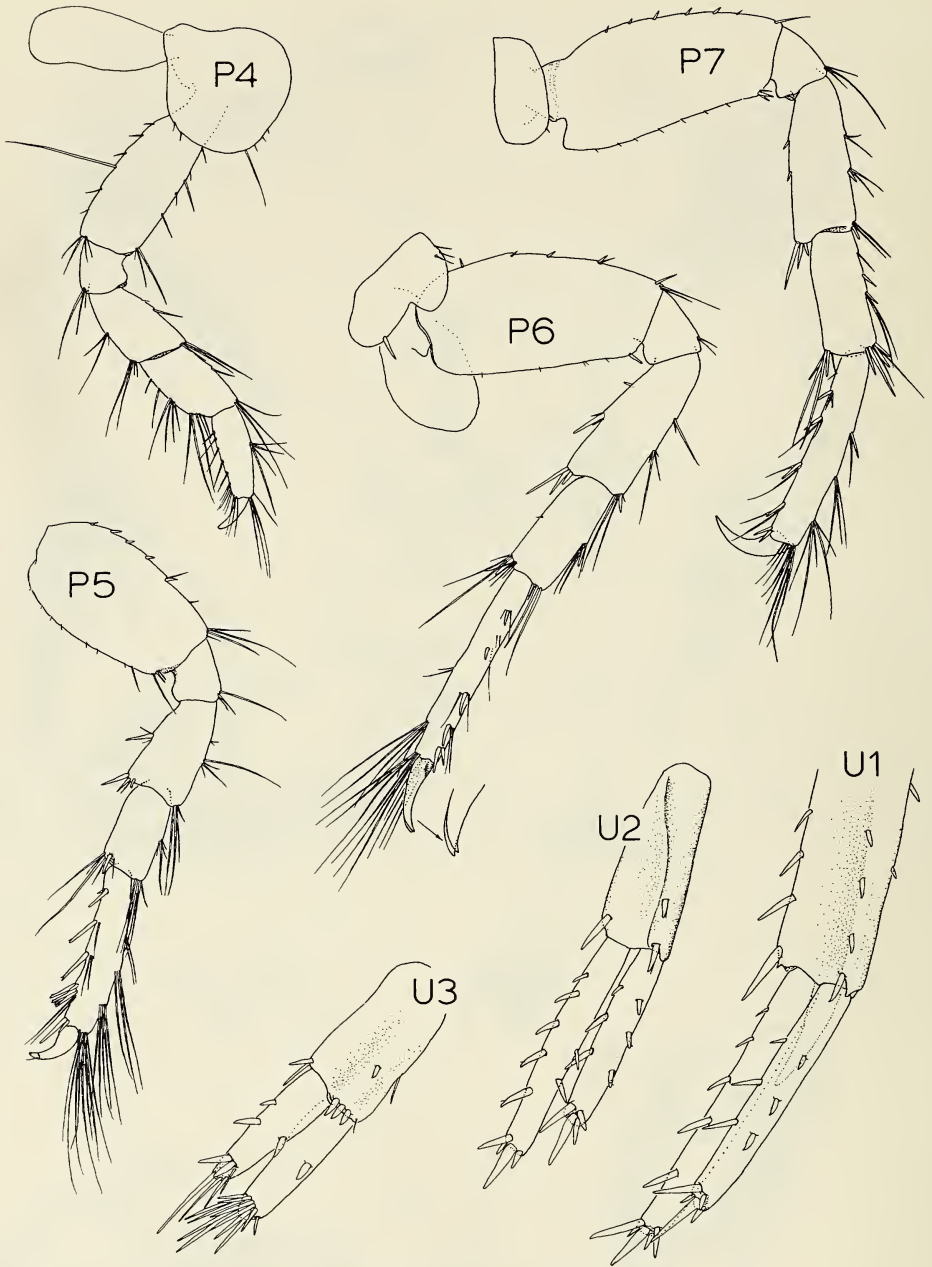


Fig. 9. *Gammaropsis lina* (Kunkel): YPM 8189, male syntype, 6.1 mm.

$\frac{1}{2}$  length outer ramus, rami longer than peduncle, outer ramus 80% inner ramus, both spinose; uropod 2 spinose, outer ramus 80% inner ramus; uropod 3, peduncle and rami subequal, rami with long distal spines.

Telson emarginate, apices separated, with 1-2 short distal spines.

Female: Syntypic female very similar to male except in form of gnathopods. Gnathopod 1 smaller than gnathopod 2, anterior margin moderately setose, posterior margin with fascicles of setae, palm oblique, lined with setae, distoposterior corner with stout spine, posterior margin article 7 ser-

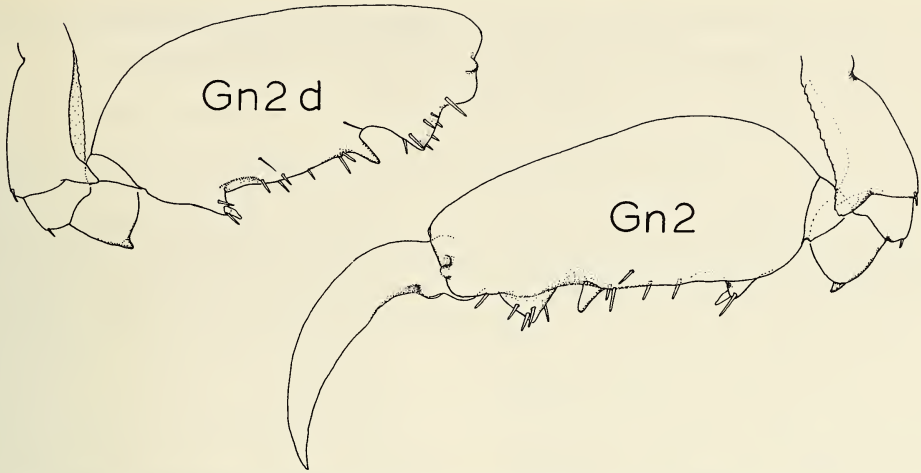


Fig. 10. *Caprella bermudia* Kunkel: YPM 8223, male lectotype, 6.3 mm: outer view (dactyl removed) and inner view.

rate. Gnathopod 2, article 6 subrectangular, anterior margin densely lined with setae, posterior margin lined with fascicles of curly setae; palm oblique, moderately crenulate, distoposterior corner produced into weak thumb, and armed with stout spine, article 7 serrate posteriorly.

*Remarks.*—The type material agrees closely with Kunkel's description in major diagnostic features; Kunkel's figures, however, lacked detail, particularly those of the mouthparts and the gnathopods. He also did not figure any of the pereopods or uropods. In the type material there are three specimens and not two as he stated; none of the specimens retained an intact antenna 2, and, therefore, one antenna for figuring was selected from several found loose inside the original vial.

*Material examined.*—YPM 8189, Bermuda, Dr. J. L. Cole, 1903, 1 syntype male, 6.1 mm.—YPM 8224, Bermuda, J. L. Cole, 1903, 1 syntype female, 5.1 mm.—YPM 8225, Bermuda, J. L. Cole, 1903, 1 syntype male [damaged, lacking head].

#### *Isaea longipalpus* Kunkel

*Isaea longipalpus* Kunkel, 1910:85–87, fig. 33.

*Remarks.*—The type material consists of

only a few rehydrated fragments (YPM 8226) from Bailey Bay, Bermuda; their poor condition is not satisfactory for redescription so Kunkel's description must stand until new material can be evaluated.

#### Caprellidae White, 1847 *Caprella bermudia* Kunkel Fig. 10

*Caprella bermudia* Kunkel, 1910:108–110, fig. 42.—McCain, 1968:22; McCain and Steinberg, 1970:13.

*Remarks.*—Although authenticated type material of *C. bermudia* was originally not found, one lot of *C. equilibra* Say, obviously examined by Kunkel, contained an individual matching his description and figures for *C. bermudia* precisely. This specimen consisted of a dissected head and first pereon segment and a matching carcass complete with gnathopod 2. The gnathopod 2 described and figured by Kunkel for *C. bermudia* is identical to gnathopod 2 of this specimen (Fig. 10). Furthermore, the dissection cleavage, directly posterior to the suture between the head and pereon segment 1 is identical with Kunkel's figure.

It is not readily apparent what characters Kunkel used to diagnose *C. bermudia*. He averred that the diagnostic character of *C.*

*equilibra* is the strong spine projecting ventrally between the gnathopods on pereonite 2. The specimen mentioned above has only a very small ventral spine between the gnathopods on pereonite 2 whereas the specimens called *C. equilibra* by Kunkel possess a very large, prominent ventral spine. On both a specimen recently collected from Bermuda and a specimen found in the USNM collections there was also a very large ventral spine on pereonite 2 even though the specimens were extremely small. It is conceivable, therefore, that Kunkel separated the two species by the appearance of the ventral spine, as no other distinctions are apparent. McCain (1968) mentioned that a variant of *C. equilibra* from North Carolina lacks the prominent ventral spine on pereonite 2; obviously, Kunkel was not aware of variants.

Kunkel apparently figured a female *C. equilibra* and a male caprellid, calling it *C. bermudia*. McCain (1968) concluded there is no way to separate *C. bermudia* from *C. equilibra*. Kunkel's figured specimen of *C. bermudia* is clearly indistinguishable from *C. equilibra* (*C. equilibra* in McCain 1968, Laubitz 1970). We believe, therefore, that the synonymy of the two is warranted.

*Material examined.*—YPM 8223, Bermuda, Dr. J. L. Cole, 15 Jul 1903, lectotype male (6.3 mm).—YPM 8208, *Caprella equilibra* (Say), Flatts Village, Bermuda, collector unknown, 4 Jul 1898, 2 males, 1 female.—YPM 8265, *C. equilibra*, Shelly Bay, Bermuda, M. F. Gable, 3 Jun 1985, among hydroids, 1 male.—USNM collection, *C. equilibra*, Bermuda, G. Brown Goode, 1876–1877, 1 ovigerous female.

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